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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Miller, Canfield, Paddock and Stone P.L.C.  
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EXAMINER

CINTINS, IVARS C

ART UNIT PAPER NUMBER

1724

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/691,297

Applicant(s)

PARKE, GEARY G.

Examiner

Ivars C. Cintins

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 17-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-16 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-16, drawn to a method and apparatus for purifying wastewater, classified in class 210, subclass 669.
- II. Claims 17-20, drawn to a method for manufacturing fish bone char, classified in class 502, subclass 437.

The inventions are distinct, each from the other because:

Inventions I and II are distinct from one another because the process and apparatus of Group I does not require the fish bone char produced by the process of Group II, as evidenced by claims 1-8 and 10-16.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Robert Roth on September 23, 2004 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-16. Affirmation of this election must be made by Applicant in replying to this Office action. Claims 17-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Casolo (U.S. Patent No. 3,985,648). The reference discloses an apparatus comprising a first sand trap (12) for filtering solids from wastewater, a second activated carbon trap (20) for filtering organics from wastewater, and a metals trap (44) for filtering metals from the wastewater (see col. 4, line 60); and this is all that is required by claims 1, 4-6 and 10. The reference further discloses that treatment unit 40 is capable of adjusting the final pH to a value approximating 7.0 (see col. 4, line 55); and this is all that is further required by claims 2 and 3.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casolo in view of Hong (U.S. Patent No. 5,665,240). Casolo discloses the claimed invention with the exception of the recited treatment with a phosphate material. Hong discloses removing contaminants from water with calcium phosphate (see col. 3, line 17); and it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of Casolo with a calcium phosphate treatment unit, as suggested by Hong, in order to provide additional contaminant removal capability for this primary reference system.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Casolo in view of Szczepanik (U.S. Patent No. 4,902,427). Casolo discloses the claimed invention with the exception of the recited treatment with bone char. Szczepanik discloses removing contaminants from water with bone char; and it would have been obvious to one of ordinary skill in the art at

the time the invention was made to provide the system of Casolo with a bone char treatment unit, as suggested by Szczepanik, in order to provide additional contaminant removal capability for this primary reference system.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Casolo in view of Schlegel et al. (U.S. Pub. No. 2002/0053547). Casolo discloses the claimed invention with the exception of the recited treatment with a metal oxyhydroxide. Schlegel et al. discloses removing contaminants from water with iron oxyhydroxide; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of Casolo with an iron oxyhydroxide treatment unit, as suggested by Schlegel et al., in order to provide additional contaminant removal capability for this primary reference system.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Casolo in view of Faylor et al. (U.S. Patent No. 3,870,033). Casolo discloses the claimed invention with the exception of the recited treatment with an oxidizer. Faylor et al. discloses purifying water with a series of treatments including oxidation (see col. 5, line 61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of Casolo with the oxidizer unit of Faylor et al., in order to provide additional purification of the liquid undergoing treatment in this primary reference system.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Casolo and Hong as applied above, and further in view of Faylor et al. The modified primary reference discloses the claimed invention with the exception of adjusting the pH and temperature of the wastewater prior to introduction into the first chamber (i.e. solids removal treatment). Faylor et al. teaches adjusting the pH of water prior to a solids removal treatment (i.e. via control unit 46); and it

would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of the modified primary reference with a similar pH control treatment prior to treatment by sand filter 12, in order to maintain better pH control over the liquid undergoing treatment in this modified primary reference system. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to control the temperature of the water entering the modified primary reference system, in order to ensure that it is at an optimum value for treatment by the various purification units in this system.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casolo and Hong as applied above, and further in view of Schlegel et al. The modified primary reference discloses the claimed invention with the exception of the recited treatment with a metal oxyhydroxide. Schlegel et al. discloses removing contaminants from water with iron oxyhydroxide; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of the modified primary reference with an iron oxyhydroxide treatment unit, as suggested by Schlegel et al., in order to provide additional contaminant removal capability for this modified primary reference system. Applicant should note that since the chambers in the thus modified primary reference each contain inlet and outlet pipes, they are "adapted for backwashing" as required by claim 16.


Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowed if rewritten in independent form to include all of the limitations of the base claim and any intervening claims because the references of record do not teach or fairly suggest an adsorption apparatus of the type recited wherein the second trap contains fish bone char.

Ishibashi et al. (U.S. Patent No. 4,118,341) discloses that it is known to make activated carbon from animal bones (see col. 1, line 48). Guistina et al. (U.S. Patent No. 6,057,072) discloses that it is known to make activated carbon from fish (see col. 3, line 43).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at (571) 272-1166.

The centralized facsimile number for the USPTO is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
September 24, 2004